

Appl. No.: 09/498,893
Amendment dated March 31, 2008
Reply to Office Action of November 28, 2007

I. REMARKS

Applicant offers the following remarks in response to the Non-Final Office Action mailed November 28, 2007.

A. STATUS SUMMARY

Claims 1, 2, 5-9, 11, 12, 14, 15, 17-23, 26-29, 39-42, and 44 are pending in the present application. No claims are added or cancelled. Accordingly, claims 1, 2, 5-9, 11, 12, 14, 15, 17-23, 26-29, 39-42, and 44 remain pending.

B. CLAIM REJECTIONS – 35 U.S.C. § 103

Claims 1, 2, 5, 8, 9, 11, 14, 15, 20, 22, 23, 26, and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,289,041 to Krasner (hereinafter "Krasner") in view of U.S. Patent No. 6,005,903 to Mendelovicz (hereinafter "Mendelovicz"). Applicant respectfully traverses.

Independent claims 1, 9, 15, 22, and 39 recite, among other things, that the complex mixer and the signal sampler are independently corrected for frequency shift and Doppler shift. The independent nature of the frequency shift and Doppler shift has previously been argued as patentably distinct over the cited references within the response filed on October 30, 2007, to the Final Office Action mailed April 30, 2007.

The Office Action mailed November 28, 2007, asserts that Krasner discloses both Doppler and frequency shift correction for the mixer and sampler. (See Office Action mailed November 28, 2007, page 2). However, the Office Action mailed November 28, 2007, does not asserted that these elements are independently corrected for frequency shift and Doppler shift.

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Accordingly, at least this element of independent claims 1, 9, 15, 22, and 39 has not been identified within the cited references and a proper rejection of these independent claims has not been formed.

Furthermore, Applicant respectfully submits that the Doppler and frequency shift correction within the Krasner reference is not independent, as required by independent claims 1, 9, 15, 22, and 39. For example, Figure 4 of Krasner illustrates a single microcontroller 428 generating a Doppler/LO Correction Signal and a Doppler Sample Time Correction signal to the Digital Frequency Translator 404 and the Digital Resampler 406, respectively. The Krasner reference describes that the microcontroller 428 implements carrier, code, and bit tracking loops in software and sends control signals to maintain proper tracking. (See Krasner, col. 8, ll. 5-10). Applicant respectfully submits that one of ordinary skill in the art would recognize that these software loops are dependent operations by the very nature of software coding within a single microcontroller. Accordingly, the combination of references does not teach or suggest independent correction for frequency shift and Doppler shift and the rejection of independent claims 1, 9, 15, 22, and 39 should be withdrawn.

Claims 2, 5, 8, 11, 14, 20, 23, 26, and 29, depend, either directly or indirectly, from one of independent claims 1, 9, 15, and 22 and the rejection of claims 2, 5, 8, 11, 14, 20, 23, 26, and 29 should be withdrawn for at least the same reasons as the independent claims from which they depend. Applicant respectfully submits that claims 1, 2, 5, 8, 9, 11, 14, 15, 20, 22, 23, 26, and 29 are in condition for allowance and notice of the same is requested at the earliest possible date.

Claims 6, 12, and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Krasner in view of Mendelovicz as applied to claims 1, 9 and 22, and further in view of U. S.

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Patent No. 5,586,148 to Furukawa et al. (hereinafter "Furukawa"). Applicant respectfully traverses.

Claims 6, 12, and 27 depend, either directly or indirectly, from one of independent claims 1, 9, and 22 and the rejection of claims 6, 12, and 27 should be withdrawn for at least the same reasons as the independent claims from which they depend. Applicant respectfully submits that claims 6, 12, and 27 are in condition for allowance and notice of the same is requested at the earliest possible date.

Claims 7 and 28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Krasner in view of Mendelovicz as applied to claims 1, 9 and 22, and further in view of U.S. Patent No. 6,714,983 to Koenck et al. (hereinafter "Koenck"). Applicant respectfully traverses.

Claims 7 and 28 depend, either directly or indirectly, from one of independent claims 1 and 22 and the rejection of claims 7 and 28 should be withdrawn for at least the same reasons as the independent claims from which they depend. Applicant respectfully submits that claims 7 and 28 are in condition for allowance and notice of the same is requested at the earliest possible date.

Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Krasner in view of Mendelovicz as applied to claim 15, and further in view of U.S. Patent No. 4,485,477 to Nossen (hereinafter "Nossen"). Applicant respectfully traverses.

Claim 21 depends directly from one of independent claim 15 and the rejection of claim 21 should be withdrawn for at least the same reasons as claim 15. Applicant respectfully submits that claim 21 is in condition for allowance and notice of the same is requested at the earliest possible date.

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Claims 17-19, 39, 40 and 44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Krasner in view of Mendelovicz as applied to claims 9 and 15, and further in view of U.S. Patent No. 6,005,885 to Warren et al (hereinafter "Warren"). Applicant respectfully traverses.

Independent claim 39 has been argued above as allowable over the cited references. Claims 17-19, and 40, and 44 depend, either directly or indirectly, from one of independent claims 15 and 39, respectively, and the rejection of claims 17-19, 40, and 44 should be withdrawn for at least the same reasons as the independent claims from which they depend. Applicant respectfully submits that claims 17-19, 39, 40 and 44 are in condition for allowance and notice of the same is requested at the earliest possible date.

Claim 41 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Krasner in view of Mendelovicz and further in view of Warren et al. as applied to claim 39, and in further view of Kocnck et al. Applicant respectfully traverses.

Claim 41 depends directly from one of independent claim 39 and the rejection of claim 41 should be withdrawn for at least the same reasons as claim 39. Applicant respectfully submits that claim 41 is in condition for allowance and notice of the same is requested at the earliest possible date.

Claim 42 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Krasner in view of Mendelovicz and further in view of Warren et al. as applied to claim 39, and further in view of Furukawa et al. Applicant respectfully traverses.

Claim 42 depends directly from one of independent claim 39 and the rejection of claim 42 should be withdrawn for at least the same reasons as claim 39. Applicant respectfully submits

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that claim 42 is in condition for allowance and notice of the same is requested at the earliest possible date.

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II. CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Office Action.

Although it is believed that no fees are due, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to our Deposit Account No. 50-2542.

Respectfully submitted,

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